

REMARKS

Status of the Claims

Claims 1-17 are pending in the present application. Claim 1 has been amended to more clearly define the invention.

Rejections Based on 35 U.S.C. § 102

The Examiner has rejected Claims 8 and 13 under 35 U.S.C. § 102(e) as being anticipated as by Brown (U.S. Patent No. 6,026,368). The Examiner indicates that Brown discloses a method for providing content and advertising to a targeted set of viewers, and that content locations and site hosts can be targeted for content. The Examiner further indicates that Brown discloses the sub item slot groups of Claim 13, as well as each other element of applicants' invention as defined in Claims 8 and 13. Applicants respectfully disagree for the following reasons.

Brown discloses a method of managing targeted advertising over a network, which is somewhat related to the present invention; however, Brown does not disclose an invention equivalent to that recited by applicants' claims. The Examiner is respectfully reminded that even if a reference discloses a method for achieving a result similar to that provided by a claimed method, it does not automatically follow that such disclosure includes *each* of the steps of the claimed method.

Claim 8 recites a computer implemented organizational method for allocating items into item slots, where the item slots are organized into item slot groups and meta item slot groups. Brown discloses organizing advertising related folder objects into files and sub-folders. However, the steps disclosed by Brown to fill each folder and sub-folder with folder objects are readily distinguished from the steps recited in Claim 8 by applicants. Brown teaches that a targeting analyst employs profile editors to create logical groupings of objects (i.e., data) in folders and sub-folders. Even if, *arguendo*, Brown's folder objects, sub-folders, and folders are considered to be equivalent to applicants' items, item slot groups, and meta item slot groups, the specific steps recited by applicants to generate and populate the item slot groups, and meta item slot groups are not disclosed by or suggested by Brown. The following discussion addresses the Examiner's apparent belief that applicants' items correspond to Brown's folder objects, applicants' item slot groups correspond to Brown's sub-folders, and applicants' meta item slot groups correspond to Brown's folders.

As recited by applicants in Claim 8, item slots, item slot groups and meta item slot groups are constructed. Note that the item slots are *empty* when they are constructed, the item slot groups include only empty item slots when they are constructed, and the meta item slot groups include only item slot groups when they are constructed. Clearly, a hierarchical framework of logical organizational elements is constructed, but the framework does not yet include data or content, but

1 instead, only includes the organizational elements. According to Brown, sub-folders are generated
2 when an existing folder object (i.e., a content) is selected, and the folder object is moved to a newly
3 created sub-folder (column 9, lines 43-46). Thus, Brown's sub-folders (a logical organizational
4 element) are not created "empty" of content and ready to be filled with content; instead, they are
5 created when the content (object) is placed in the sub-folder. Brown's approach is clearly not
6 equivalent to applicants' recited method. Brown does not teach that empty item slots should be
7 included in each item slot group. As Brown creates new folders or sub-folders, these logical
8 organizational elements are not separated into a predefined number of sub-components (such as
9 empty files).

10 Not only is the creation of applicants' logical organizational elements (i.e., item slots, item
11 slot groups, and meta item slot groups) distinguishable from the method disclosed by Brown, the
12 steps by which applicants' claimed invention *fills* those logical organizational elements are also
13 distinguishable from the method disclosed by Brown. According to Brown, sub-folders are filled
14 by targeting analysts moving folder objects from folders to sub-folders (sub-folders that are created
15 by moving a first folder object into the newly created sub-folder). The targeting analyst can fill
16 folders by adding existing profile definitions (i.e., folder objects) or other folders into a folder
17 (column 9, lines 38-41).

18 In applicants' invention, meta item slot groups are filled by matching characteristics of a
19 plurality of items of a first type with specific meta slot groups. The first type of item is not directed
20 to specific item slot groups within the same meta slot group. Next, a plurality of items of a second
21 type are added to the logical organizational elements, as recited by applicants, such that the items
22 of the second type are matched to specific item slot groups within the meta item slot groups, and
23 the items of the second type fill empty item slots in corresponding item slot groups. Finally, the
24 items of the first type are moved from the meta slot groups to available item slots within item slot
25 groups in each meta item slot group.

26 Explained in the terms Brown employs in describing his invention, the present invention
27 might be viewed as generating a plurality of empty sub-folders and folders. Each sub-folder
28 includes a plurality of empty item slots. However, Brown does not specifically disclose any logical
29 organizational elements equivalent to an empty item slot, although the Examiner may believe that
30 an empty file is equivalent to an empty item slot. However, empty files are typically not pre-
31 generated when a plurality of objects are organized. Instead, files are created as required when
32 organizing objects. Thus, using the terms employed by Brown, the present invention might be
33 viewed as constructing a plurality of sub-folders, each including a plurality of empty files. Objects
34 of a first type are added to folders based on characteristics of the object and folder. Objects of a
35 second type are added to files in specific sub-folders, based on characteristics of the object and sub-

1 folder. Then, all objects of the first type are moved from the folders to individual files in the sub-
2 folders (i.e., files that have not already been filled with objects of the second type). Brown does
3 not disclose adding content to folders or sub-folders using those specific steps, and therefore,
4 cannot anticipate the present claimed invention.

5 It is important to understand that in the context of the present invention, each item slot
6 group (i.e., each "sub-folder") includes a pre-determined number of item slots (i.e., "files"). That
7 pre-determined number corresponds to number of empty item slots that are included when each
8 item slot group is generated. Brown clearly teaches that sub-folders and objects are generated as
9 required, with no apparent limitation (beyond available hardware/system resources) on the number
10 of files in each sub-folder. Clearly, the item slot groups of the present invention are not equivalent
11 to the sub-folders disclosed by Brown, because the item slot groups of the present invention include
12 only the number of item slots that were included in the item slot groups when they were created,
13 whereas the sub-folders of Brown are not limited to a fixed number of files, but expand in number
14 as needed.

15 Brown does not anticipate the present invention because the sub-folders disclosed by Brown
16 are not equivalent to applicants' item slot groups, because Brown's logical organizational elements
17 (i.e., folders, sub-folders and files) are not created devoid of content and later filled with content,
18 and because applicant's logical organizational elements (i.e., item slots, item slot groups, and meta
19 item slot groups) are filled in a manner that is clearly different and not obvious in view of the
20 method disclosed by Brown.

21 Moreover, the disclosure in the cited art does not merit a conclusion that it would have
22 been obvious to modify Brown's method to achieve the invention recited in Claim 8. To
23 establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must
24 be some suggestion or motivation, either in the references themselves or in the
25 knowledge generally available to one of ordinary skill in the art, to modify the reference(s) or
26 to combine reference teachings to produce the claimed invention. Second, there must be
27 a reasonable expectation of success in making such a combination. Finally, the prior art
28 reference (or references when combined) must teach or suggest all elements or steps recited in the
29 claim. *In Re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Further, with respect to
30 determining obviousness, MPEP § 2141 indicates that the following basic considerations must be
31 adhered to:

32 (A) The claimed invention must be considered as a whole;
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34 (B) The references must be considered as a whole and must suggest the
35 desirability and thus the obviousness of making the combination;

(C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and

(D) Reasonable expectation of success is the standard with which obviousness is determined.

For the reasons set forth below, applicants submit that the Examiner has failed to establish a *prima facie* basis for the rejection of the claims, particularly in light of the considerations described in MPEP § 2141.

To achieve an equivalent invention, Brown's method would need to be modified such that a targeting analyst would generate a pre-defined number of folders, sub-folders, and files that included no content. Brown's method would also need to be modified so that each sub-folder could only include the pre-defined number of files, and that no additional files could be added to a sub-folder. Brown's method would need to be still further modified, so that the folders, sub-folders and files were filled by adding objects of a first type to the appropriate folders and objects of a second type to files in specific sub-folders, and so that objects of the first type previously added to the folders are moved to files in specific folders that are not already filled with objects of the second type.

None of the cited art teaches or suggests the desirability of such modifications, and thus, there is not reason why one of ordinary skill in the art would be motivated to make any of the above-noted modifications. Brown appears to disclose well-known hierarchical file management techniques, where files are added to folders and sub-folders as required, and new files, sub-folders and folders are generated on demand, in response to adding content (objects) to a new file, sub-folder or folder.

It is also unclear why one of ordinary skill in the art would have modified Brown's method to restrict folders or sub-folders to including only a pre-defined number of files. There is no suggestion in the cited art as to why such a modification is desirable. Further, there does not appear to be any suggestion to populate the folders and sub-folders disclosed by Brown using the steps recited in Claim 8. None of the cited art suggests the specific sequence of steps recited in Claim 8 to fill the item slots, the item slot groups, and the meta item slot groups. Furthermore, none of the cited art suggest that *any* modification to the method disclosed by Brown would be desirable, much less the specific modifications required to achieve applicants' claimed invention as defined in Claim 8.

Claim 13 adds additional steps related to sub item slot groups, as well as substantially including the steps of Claim 8, which as described in detail above, is distinguished over the cited art. For the reasons discussed above, Brown does not anticipate or render the invention recited in Claims 8 and 13 obvious. Accordingly, the rejection of Claims 8 and 13 under 35 U.S.C. § 102(e) as being anticipated as by Brown (U.S. Patent No. 6,026,368) should be withdrawn.

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1 Rejections Based on 35 U.S.C. § 103

2 The Examiner has rejected Claims 1-7, 9-12, and 14-17 under 35 U.S.C. § 103(a) as being
3 unpatentable over Brown (U.S. Patent No. 6,026,368), in view of Hoyle (U.S. Patent
4 No. 6,141,010). The Examiner indicates that Brown discloses an equivalent invention, except for
5 displaying information in a bar graph format, relies on Hoyle for teaching complex graphical
6 displays, and argues that it would have been obvious to combine Hoyle's graphics with Brown's
7 advertising method to achieve the present claimed invention. The Examiner further indicates that
8 such a combination of Brown and Hoyle includes each of the elements recited in applicants'
9 dependent claims. Applicants respectfully disagree that the present claimed invention is obvious in
10 view of the cited art for the following reasons.

11 Claim 1 recites a computer implemented organizational method for allocating items into
12 item slots, where the item slots are organized into item slot groups. As noted above, Brown
13 discloses organizing advertising related folder objects into files and sub-folders. For the reasons
14 provided below, the steps disclosed by Brown to generate and fill each folder and sub-folder with
15 folder objects are distinguishable from the steps recited in Claim 1, and there does not appear to be
16 any basis in the cited art to conclude that it would have been obvious to modify Brown's method to
17 achieve the present invention, even in view of Hoyle's disclosure.

18 Applicants' claims specifically recite that a plurality of item slot groups are constructed,
19 such that each item slot group includes a plurality of empty item slots. Each item slot recited by
20 applicants' claims can be filled by an item. Brown clearly teaches that sub-folders are generated
21 when an existing folder object is selected, and that folder object is moved from an existing folder to
22 a newly created sub-folder (column 9, lines 43-46). Even if, *arguendo*, Brown's folders are
23 considered to be equivalent to applicants' item slot groups, and files or sub-folders in such folders
24 are considered to be equivalent to applicants' item slots, Brown does not teach or suggest that
25 folders including a plurality of empty files or item slots should be created.

26 Brown teaches folders and sub-folders that include folder objects and discloses well-known
27 hierarchical file management techniques, wherein files are added to folders and sub-folders as
28 required, and new files, sub-folders, and folders are generated on demand, in response to adding
29 content (objects) to a new file, sub-folder or folder. Brown does not teach that folders (or sub-
30 folders) are generated to include a plurality of empty files into which content, such as an object or
31 an item, can be added. A folder (or sub-folder) that includes no objects is not equivalent to a folder
32 (or sub-folder) that includes a plurality of empty item slots (filed) into which items (objects) can be
33 inserted.

34 Items/objects can be added to the folders and sub-folders disclosed by Brown. However, if
35 an item/object is added to an existing folder, that item/object is not added to an empty and pre-

1 existing item slot or file in that folder. Instead, a new file is created so that the item/object is added
2 to that file. Brown generates files as items/objects are added, presumably until all system resources
3 are consumed. In contrast, applicants' item slot groups are constructed so as to include a
4 predefined number of empty item slots. Once the item slots are filled, no additional items can be
5 added to that item slot group.

6 Given the disclosure provided by Brown and Hoyle, as well as the knowledge generally
7 available in the art, it is not clear why one of ordinary skill in the art would have been motivated to
8 modify Brown's method to generate a defined number of item slot groups, each including a defined
9 number of empty item slots. The references do not teach or suggest the desirability of making such
10 a modification, and the combination that is based on the premise of making such a modification
11 appears to benefit from impermissible hindsight. A conclusion that the present invention as defined
12 in Claim 1 is obviousness in view of the cited art is not supported in light of the considerations
13 described in MPEP § 2141.

14 Claim 1 is further distinguished over the cited art because applicants' invention fills item
15 slots and item slot groups in a manner that is different than Brown. As noted above, Brown teaches
16 that sub-folders are both *generated and filled* as a targeting analyst's moves folder objects from
17 folders to sub-folders. The targeting analyst can also fill folders by adding existing profile
18 definitions (i.e., folder objects) or other folders into a folder (see column 9, lines 38-41 of Brown).

19 In applicants' claimed invention, items of a first type are introduced into *unfilled* item slots
20 based on characteristics of the item and item slot groups. Then, items of a second type are
21 introduced into *unfilled* item slots based on characteristics of the item and item slot groups. Since
22 the number of item slots are finite and fixed at the time the item slot groups are constructed, a
23 finite and defined total number of items can be allocated in applicants' claimed
24 invention. According to Brown, additional objects are added as needed, and new sub-folders
25 are created as required. Significantly, Brown does not teach adding items to only unfilled
26 item slots, because Brown does not teach, or require, a predefined number of item slots into which
27 items can be added. Because Brown does not disclose or suggest unfilled item slots, Brown clearly
28 cannot teach adding objects (or items) to only unfilled item slots. There appears to be no basis for
29 concluding that the disclosure of Brown, even when combined with the disclosure of Hoyle, would
30 lead one of ordinary skill to modify Brown's method, so as to include filling only unfilled item
31 slots.

32 Claim 1 further recites displaying the item slot groups as a histogram, with each bar
33 corresponding to a different item slot group, and the number of item slots per each item slot group
34 defining a height of the bar. Such a histogram clearly indicates the number of unfilled item slots
35 remaining in each item slot group.

1 The Examiner notes that Hoyle discloses advertising information in various graphical
2 formats, and concludes that it would be obvious to modify Brown to graphically display such
3 information, thereby achieving the claimed invention. However, Hoyle does not specifically
4 disclose a histogram in which each item slot group (folder or sub-folder) is displayed as a bar.
5 Even if a graphical display is included in Brown, there does not appear to be any suggestion in the
6 cited art that a histogram based graphical display is more desirable than the non-histogram
7 graphical displays specifically disclosed by Hoyle. Given the number of different types of
8 graphical displays that can be utilized, and that neither Hoyle nor Brown specifically discloses
9 histogram based displays, it appears that the Examiner improperly employed hindsight in
10 concluding that applicants' use of a histogram is obvious.

11 To achieve an invention equivalent to that claimed by applicants, Brown's method would
12 need to be modified such that a targeting analyst would generate a pre-defined number of empty
13 item slots (files or sub-folders) arranged in a plurality of item slot groups (folders). Brown's
14 method would also need to be modified such that objects/items are only added to unfilled item
15 slots/files. Finally, Hoyle's disclosed graphical displays would need to be modified to include
16 histograms, and those histograms would need to be incorporated into Brown's method, so that
17 empty item slots are clearly identified in the histograms. For the reasons discussed above, such a
18 combination and modification of the prior art is not supported by any teaching or suggestion in the
19 cited art regarding the desirability of such a combination and modification, and such a combination
20 and modification appears to impermissibly rely on hindsight.

21 It should be noted that the above discussion is directed to the patentability of
22 independent Claim 1. Independent Claims 8 and 13 are patentable for essentially the same reasons
23 (the recited method for creating and filling item slot groups and item slots is distinguishable and
24 non-obvious). The above discussion does not provide reasons why the dependent claims are also
25 patentable over the prior art of record. But, applicants' decision not to discuss the specific reasons
26 why the dependent claims are patentable over the cited art should not be construed as an indication
27 that the dependent claims do not recite patentable subject matter. Each independent claim is
28 patentable for the reasons noted above, and a thorough analysis of each dependent claim is not
29 justified at this time, since the dependent claims are patentable for at least the same reasons as the
30 independent claim on which each ultimately depends. Accordingly, the rejection of
31 Claims 1-7, 9-12, and 14-17 under 35 U.S.C. § 103 as being unpatentable over Brown in view of
32 Hoyle should be withdrawn.

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In consideration the Remarks set forth above, it is submitted that all claims in the application define a novel and non-obvious invention and are thus patentable. The Examiner is therefore requested to pass this case to issue without delay. Should any further questions remain, the Examiner is invited to telephone applicants' attorney at the number listed below.

Respectfully submitted,

Ron Anderson

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid addressed to: Director of Patents and Trademarks, Arlington, VA 22202, on December 11, 2002.

Date: December 11, 2002

Katay Farin

MARKED-UP VERSION OF THE AMENDMENTS

Amendment to the Claims

In the Claims:

Please amend Claim 1 as follows:

1. (Amended) A computer-implemented method comprising:

constructing a plurality of item slot groups, each group having a predefined number of item slots, each item slot initially unfilled and able to be filled by an item;

allocating each of a plurality of items of a first type [over] to the item slots of the item slot groups that are unfilled by matching characteristics of the first type of items to characteristics of the item slot groups, such that allocating an item to an item slot fills the item slot with the item;

allocating each of a plurality of items of a second type [over] to the item slots of the item slot groups that are unfilled by matching characteristics of the second type of items to the characteristics of the item slot groups, such that allocating an item to an item slot fills the item slot with the item; and

displaying the plurality of item slot groups as a histogram having a plurality of bars, where each bar corresponds to an item slot group and has a height corresponding to the number of item slots of the item slot group, wherein the bar has an indication as to how many of the number of item slots of the item slot group are filled and how many of the number of item slots of the item slot group are unfilled.